GLOSSARY OF TERMS

The following is not an exhaustive listing, but includes commonly used computer and Internet terms. Definitions have been derived from a variety of sources (see the listing at the end).

Access Control Lists (ACL)

A list contained on a server that determines who has access to various resources on the server.

Algorithm

A mathematical formula outlining steps to a conclusion. Algorithms are used to encrypt and decrypt data for security purposes.

Applet

A mini Java application that can be embedded on an HTML page and runs in a Web browser.

Appletalk

A communication protocol used by the Apple operating system.

Application

A computer program that performs a particular function. Microsoft Word is an example of a word processing program.

Asymmetric Encryption

Also called public-key encryption. Encryption that uses one key to encrypt a message and another to decrypt it.

ATM

ATM is an abbreviation for "Asynchronous Transfer Mode," and is the protocol used as the core switching technology for the Indiana Telecommunications Network (ITN). This cutting-edge network technology allows for simultaneous transfer of large volumes of voice, video and data traffic.

Authentication

The process of identifying a user, usually by a username and password; may include use of a digital signature.

B2B (Business to Business)

On the Internet, business-to-business is the exchange of products, services, or information between businesses rather than between businesses and consumers.

B2C (Business to Consumer)

Business-to-consumer is the retailing part of e-commerce on the Internet. Some B2C companies were founded in cyberspace (e.g., Amazon.com), others augmented storefront sales channels with a Web presence, and others started with catalogue /call center sales channels (e.g., LandsEnd).

Bandwidth

Bandwidth refers to the size of the "pipe" through which digital information flows and is typically measured by the amount of data transmitted per second. Commonly used examples are:

- 56K Actual data transmission speed for a 64 Kbps circuit with 8 Kbps used for signaling. This is a standard digital circuit installed to provide data services to a subscriber.
- T-1 (trunk level 1) A dedicated connection that can carry voice, video, and data traffic with the capacity of 1.544 Mbps. A T-1 uses two pairs of normal twisted wires. A T-1 can handle

- 24 voice conversations simultaneously. A T–1 is a standard for digital transmission in the United States, Canada, Hong Kong, and Japan.
- Cable modem Designed to operate over cable TV lines with a maximum speed of 1.5 Mbps.
- DSL (Digital Subscriber Line) a constant Internet connection offered through telephone companies, characterized by low upload speeds but fast (8 Mbps) download speeds. DSL service availability is constrained by proximity to telephone company "point of presence" (must be within three miles).

Banner Ads

Advertisements placed on Web sites that may have a link to another site.

Rand

In common usage the baud rate of a modem is a measure of the maximum number of electronic signals (bits) that it can send or receive per second.

Bit (Binary DigIT)

A single digit number in base-2 – in other words, either a 1 or a zero. The smallest unit of computerized data.

Bookmark

A function that allows you to save frequently used URLs to a personal menu so that you don't have to type out the complete address each time you want to access a site.

Browser

Short for Web browser; it's the tool (program) that allows you to surf the Web. You probably used your Web browser to locate this page. The most popular Web browsers right now are Netscape Navigator and Microsoft Internet Explorer. A browser program is used to read HTML documents over the Internet. Text, graphics and video can also be displayed in a browser.

Certificate Authority (CA)

A trusted third party that issues digital certificates and verifies that the person using the certificate is who he or she claims to be.

Chat Room

A place on the Internet where people go to "chat" with other people in the room. There are thousands of chat rooms, usually organized by topic. For example, in a Michigan Room you would expect that most of the participants in the room are probably from Michigan. When you're in a chat room you can view all of the conversations taking place at once on your screen. You can also get into a private chat room where only you and one or two others may talk. This can be an inexpensive way to keep up with friends and relatives who are online.

Ciphertext

Unreadable text that has been encrypted.

Client

A software program that is used to obtain information from a server program on another computer. Client programs are designed to work with specific kinds of server programs.

Common Gateway Interface (CGI)

A scripting program that defines a set of rules that specify how Web servers and other software communicate.

Competitive Local Exchange Carrier (CLEC)

A telecommunications carrier that started providing services in a specific region after the enactment of the Telecommunications Act of 1996.

Compression

The process of reducing the size of data. Data is usually compressed to make it easier to transfer or store, and it is expanded again once it is needed.

Connectivity

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Cookie

A message given to a Web browser by a Web server. The browser stores the message in a text file. The message is then sent back to the server each time the browser requests a page from the server.

The main purpose of cookies is to identify users and prepare customized Web pages for them. When you enter a Web site using cookies, you may be asked to fill out a form providing such information as your name and interests. This information is packaged into a cookie and sent to your Web browser, which stores it for later use. The next time you go to the same Web site, your browser will send the cookie to the Web server. The server can use this information to present you with custom Web pages. So, for example, instead of seeing just a generic welcome page you might see a welcome page with your name on it.

Copyright

A form of protection provided to authors of original works, which can include novels, songs, plays, and artwork. Copyrights protect the way ideas are expressed, not subject matter.

Cyberspace

Term used to describe the Internet; the term was coined by science-fiction novelist William Gibson in 1984 in *Neuromancer*.

Cryptographic Algorithm

A mathematical program that scrambles a message to render it illegible. Usually one "key" is able to reverse the process so the message is legible.

Database

A structured collection of related data stored in a computer. The term also refers to a software program that stores data for easy retrieval. Database servers contain information for clients to retrieve.

Data Warehouse

A data warehouse is a central repository for all or significant parts of the data that an enterprise's various business systems collect.

Decision Support System

A decision support system (DSS) is a computer program application that analyzes business data and presents it so that users can make business decisions more easily. A related term is Executive Information System (EIS).

Decryption

The process of unscrambling text that is illegible.

Digital Certificate

The attachment to an electronic message that verifies the identity of the sender.

Directory

A Web site designed to help users find information on the Web. Directories are indexed by people.

(economic) Disintermediation

"Disintermediation can be defined as the reduction or elimination of the role of retailers, distributors, brokers, and other middlemen in transactions between the producer and the consumer." [PPI Best States for E-Commerce – March 2002]

Disk drive

A magnet storage device that records data on flat rotating disks.

Diskette

A thin interchangeable disk of secondary random-access data storage (same as floppy disk, although no longer flexible like the increasingly rare $5\frac{1}{4}$ " diskettes).

Domain Name System (DNS)

A domain name simplifies finding and remembering Web and email addresses. In the Web address "www.icann.org", icann.org is the domain name. The DNS links the domain name with the IP (Internet Protocol) address of the computer or server on which the addressee resides. An alternative method for locating specific Web pages on the Internet is to search for the IP address. For example, the IP address for icann.org is 192.0.34.65. More information about DNS (the hierarchical global registry system for IP addresses) and the Internet Corporation for Assigned Names and Numbers (ICANN) can be found at http://www.internic.org/fags/authoritative-dns.html.

Top Level Domains (TLD) refer to the limited name registries that include: .com, .net, .org, .gov, .biz, .name, .info, .museum, and country code top level domains (such as .us, .fr, .uk).

Download

The transfer of information from the Internet to your computer. Every time you instruct your computer system to retrieve your mail, you are downloading your mail to your computer. You may

also download programs to your computer. However, be careful about downloading files or programs from a site with which you are not familiar. You could download a virus and be unaware that you have done so.

E-Government

E-Government is the electronic delivery of government services and/or transaction of government business. Applications range from citizen-centered programs that allow electronic filing of taxes (whether through a telephone or computer interface) or purchase of licenses and state park permits over the Internet to government-centered programs for electronic reporting.

Electronic Data Interchange (EDI)

The exchange of documents in a structured form between computers via data networks. EDI is used most commonly for purchasing and distribution - orders, confirmations, shipping papers and invoices.

Encryption

The process of scrambling data so it is unreadable.

EXtensible Markup Language (SML)

A structured language on the Web used to describe the content of a document. It facilitates the process of Web applications connecting to different types of systems.

Extranet

A business-to-business Web site that allows for access to a company's intranet by authorized remote users.

FAQ

An acronym for Frequently Asked Questions, with the answers of course.

Firewall

A hardware component, usually a server, that blocks entry into another server. Firewalls are used as a security component.

Gateway Server

A server that separates a Web server from the rest of the Internet.

Graphical User Interface (GUI)

Hard Disk

A permanently installed, continuously spinning magnet storage medium made up of one or more rigid disk platters.

Hardware

Physically tangible components of a computer or a computer network.

Home Page

Name given to the introductory page for a Web site. www.cnn.com is an example of a homepage for CNN.

Hypertext

Text on a Web page that links the user to another Web page. The "clickable" text written in HTML

that allows users to link to other Web pages. The hypertext, or link, will usually be a different color than the other text on the page and is usually underlined.

Hypertext Markup Language (HTML)

The "language" used to create documents on the World Wide Web. HTML is not really a programming language, but a way to format text by placing marks around the text. For example HTML allows you to make a word bold or underline it. Early word processing programs used to work this way. HTML is the foundation for most Web pages.

Hypertext Transfer Protocol (HTTP)

Communication protocol used on the World Wide Web.

Incumbent Local Exchange Carrier (ILEC)

A telecommunications service provider or carrier that provided local exchange service to specific areas prior to the date of enactment of the Telecommunications Act of 1996.

Intellectual Property (IP)

Products such as written materials, musical compositions and other materials that are protected by trademarks, patents and copyrights.

Interface (IF)

The visual appearance of an application. Functionality of an application can be dependent on its interface.

Internet (the Net)

An interconnected network of computers around the world. Originally called ARPANET after the Advanced Research Projects Agency of the U.S. Department of Defense, this electronic network connects the hosts (computers that house Web documents) together so that you may go from one Web page to another efficiently. The electronic connection began as a government experiment in 1969 with four computers connected together over phone lines. By 1972, universities also had access to what was by then called the Internet.

ISDN (Integrated Services Digital Network)

International communications standard for sending voice, video and data over digital telephone lines or normal telephone wires. ISDN supports data transfer rates of 64 Kbps. Most ISDN lines offered by telephone companies provide two lines at once, called B channels. One line can be used for voice and the other for data, or both can be used for data to provide data rates of 128 Kbps.

ISP

Internet Service Provider, such as AOL or Iquest. This is your connection to the Internet. You use an ISP to connect onto the Internet every time you log on.

Intranet

A private information network that provides services similar to the Internet but is not connected to the Internet. It is used to share information within a company.

Java

A programming language used for the Web. It is flexible since it is capable of running on several operating systems.

Local Area Network (LAN)

A group of computers connected locally, using cabling inside a facility, rather than accessing through a telecommunications service provider (such as Ameritech, Verizon, AT&T, McLeod). A LAN usually connects computers in an office setting.

Link

A link will transport you from one Internet site to another with just a click of your mouse. Links can be text or graphic and are recognizable once you know what to look for. Text links usually will be underlined and often a different color than the rest of the text on your screen. A graphic link usually has a frame around it.

Megabyte (MB or Meg)

1,048,576 (or about one million) bytes.

Message Digest

An application used to assure the recipient that the message has not been altered in transit.

Meta Tag

Code embedded in a Web page that is "read" by tools that index Web page content so that search engines can match queries to sites.

Microprocessor

A computer on a single chip. The processing component of a personal computer.

Middleware

Hardware or software used to facilitate communication between unlike systems.

Modem

Modems allow computers to transmit information to one another via ordinary telephone line.

Menu

A display with a list of processing or content choices from which a user may select.

Monitor

A television-like display for softcopy output in a computer system.

Mouse

A point-and-draw device that, when moved across a desktop a particular distance and direction, causes the same movement of the cursor on a screen.

Net

Short for Internet.

Network Level Firewall

A type of firewall that "decides" if information (packets) is able to enter based on its origin and destination.

Nonrepudiation

The ability to prove that a particular Internet or other electronic transaction took place.

Online

Having access to the Internet. Often people will say they are online meaning they have access to the Internet and have an e-mail address, but may not necessarily be connected to the Internet at that moment.

Operating System

The software that controls the execution of all applications and system software programs. Common operating systems are Windows, Apple Macintosh, UNIX and LINUX. Both single computing devices and networks use operating systems.

Password

A word or phrase known only to the user. When entered, it permits the user to gain access to the system. A password is one security mechanism ("something you know"); others are based on "something you have" (a token such as a security card or badge) and "something you are" (biometrics, for example, such a thumbprint or retinal scan).

PDF (Adobe Portable Document Format)

This is a file distribution format developed by Adobe Corporation to allow electronic information to be transferred between various types of computers. PDF files are visually rich electronic documents. They have all the color, graphics, and layout of the original publication but can be read on more than one type of computer system, without the reader having the software that originally created the document. When printed, the copy will be as faithful to the original as a printer can produce, keeping the original look and feel created intact.

In order to view and print a PDF, a copy of Adobe Acrobat Reader needs to be downloaded and installed on your computer. This software is available free of charge from Adobe Systems, for almost all operating systems. Anyone who already has this software may want to periodically check to see if they have the latest version. For your convenience, below is a link to visit Adobe's site.



Packet

Information that travels on the Internet is broken into "packets." Packets contain information about where they are from, where they are going and the actual information that is being transmitted.

Patent

Gives exclusive rights to an inventor to use or sell an invention. Patents are issued in different countries, and the rules are different for each one.

Pervasive Computing

The process of making electronic devices and gadgets work together in ways that are simpler, smarter and more user-friendly.

Plaintext

A message in its legible form before it has been encrypted or after it has been decrypted.

Plug-in Applications

Applications that can be added to a browser to extend its functionality.

Portal

A Web site that provides a catalog of other Web sites and usually contains a search engine so that users can have a single point of entry (portal) into the Web for finding information and performing other functions such as email, etc.

Private Key

A key held by an individual or organization that is able to unlock messages encrypted with a public-key. A private-key may not be found with knowledge of a public-key.

Proxy Server

A server that is used for administrative control and access control between the Internet and a server that contains the Web pages.

Public Key

Key that a user publishes in public-key encryption. If someone sends the individual an electronic message, the public-key initially encrypts the message. The private-key unlocks the message.

Public Key Encryption

Cryptographic system that uses two keys -- a public one that is known to everyone and a private one that is only known by the recipient.

Pull-down menu: A menu that is "pulled down" from an option in a higher-level menu.

Push Technology

A number of software technologies that enable a company or an organization to send customized information to users.

Referrer Bonuses

Refers to payment or credit relationship between businesses when a customer is sent to another business' site from the original business' site.

Router

A piece of hardware that optimally directs information (packets) over the Internet or other communications network, such as a LAN.

Scroll

To look at the parts of the page that fall below (or above) what you see on your screen. The long bar at the far right of this screen is a scroll bar.

Screening Router

A router used to determine what information (packets) enter a network. It is a common type of firewall.

Search Engine

A Web site designed to help users find information on the Web. Search engines use automated programs called "spiders" to retrieve information from the Web.

Secure Electronic Transaction (SET)

A standard that allows for secure credit card transactions over the Internet.

Secure Multipurpose Internet Mail Extensions (S/MIME)

S/MIME is an encryption algorithm used for the security of emails. It was developed by RSA, a leading Internet security firm.

Secure Sockets Layer (SSL)

A technology that is built into browsers to encrypt and secure network traffic over the Internet.

Server

A computer that makes information available to clients over a network, whether it is a LAN, WAN, or the Internet.

Service Mark

A name or a symbol that represents a merchant's service that differentiates it from others.

Site Map

Usually refers to a textual or graphical outline of a Web site that includes major sections and subsections.

Software

Computer programs that run a computer or perform other operations.

Spam (or Spamming)

The Internet version of junk mail. Spamming is sending the same message to a large number of users, usually to advertise something.

SQL

Structured Query Language (SQL) is a specialized language for sending queries to databases.

SQL Server

SQL server is not hardware, but a relational database management system from Sybase that runs on OS/2, Windows NT, NetWare, VAX and UNIX servers. It is designed for client/server use and is accessed by applications using SQL or via Sybase's own Query by Example (QBE) and decision support utilities. Microsoft has its own version called Microsoft SQL Server.

Storage Area Network (SAN)

A dedicated network that connects servers or clusters of servers to pools of data storage and archiving devices at higher transfer rates and over greater distances than are practical with conventional storage connection technologies. A SAN consolidates storage, facilitates expansion and management of the network, enhances disaster recovery and data center mirroring over moderate distances. The leading infrastructure technology for SANs is FibreChannel, which has up to 2 Gbps of throughput. FibreChannel can connect devices at distances up to six miles if the connection is over fiber-optic cabling.

Symmetric Encryption

Encryption that uses one key to encrypt and decrypt a message. The sender and receiver have separate copies of the same key.

Surfing

The process of "looking around" the Internet, usually with the aid of a search engine.

RAM (Random-Access Memory)

The memory area in which all programs and data must reside before programs can be executed or data manipulated.

Trademark

A name or a symbol that represents a merchant's product that differentiates it from others.

Transmission Control Protocol / Internet Protocol (TCP/IP)

TCP/IP is an Internet protocol that is connectionless. It provides the routing protocol for information that is sent among clients and servers. Internet servers have a TCP/IP "address" that identifies a Web page location to routers.

Uniform Resource Locator (URL)

A registered name assigned to a unique "address" for a Web page or Web site.

Unsolicited Commercial Email (UCE)

Also known as spam.

User ID

A unique name (e.g., logon name) used to identify oneself to a computer system or network.

VGA (Video Graphics Array)

A circuit board that enables the interfacing of very high-resolution monitors to microcomputers.

Virtual Private Network (VPN)

A secure network between two sites that uses Internet technology to send information. Requires the same encryption device to be used at both ends of the network.

Virtual Reality Modeling Language (VRML)

A Web file format that renders three-dimensional objects in a browser. Its two-dimensional counterpart is HTML.

Virus

A computer virus refers to programming code designed with malicious intent. A virus can wipe out information on your computer, send false messages under your name to your email correspondents, and generally create major havoc. A virus can be unintentionally downloaded from a Web site, transferred in an email attachment, or contained in a diskette from someone else. Virus-checking programs are available commercially, and can be configured to download new virus codes as they appear. The best defense against a virus is to be very careful not to download programs or data from a site you are not familiar with and beware of opening attachments from unfamiliar people. Sites such as www.viruslist.com and http://hoaxbusters.ciac.org (Computer Incident Advisory Capability managed by the U.S. Department of Energy) contain virus and hoax updates.

Web Browser

The tool (program) that allows you to surf the Web. You probably used your Web browser to locate this page. The most popular Web browsers right now are Netscape Navigator and Microsoft Internet Explorer.

Web Page

A Web page is the content element of a Web site. A Web page can be static, linked to other Web sites or documents, or dynamically linked to database information.

Web Server

A central computer system that hosts a Web site and enables users to access it remotely.

Web Storefront

A site on the Internet that allows users to interact with a company in much the same way that they would in regular "brick and mortar" stores. Web stores provide catalogs, ordering and after-sales support.

Webcasting

The use of the World Wide Web to broadcast information to subscribers.

Wide Area Network (WAN)

A network in which computers are connected to each other over a long distance, using dedicated telecommunications channels (including copper, fiber, satellite).

World Wide Web (WWW) or Web

A network within the Internet that allows users to click on text and objects and move to virtually any server linked to it. As the name implies, the World Wide Web is a global mass of Web pages connected together through registered links.

Sources: National Institute for Standards and Technology (www. nist.gov)

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